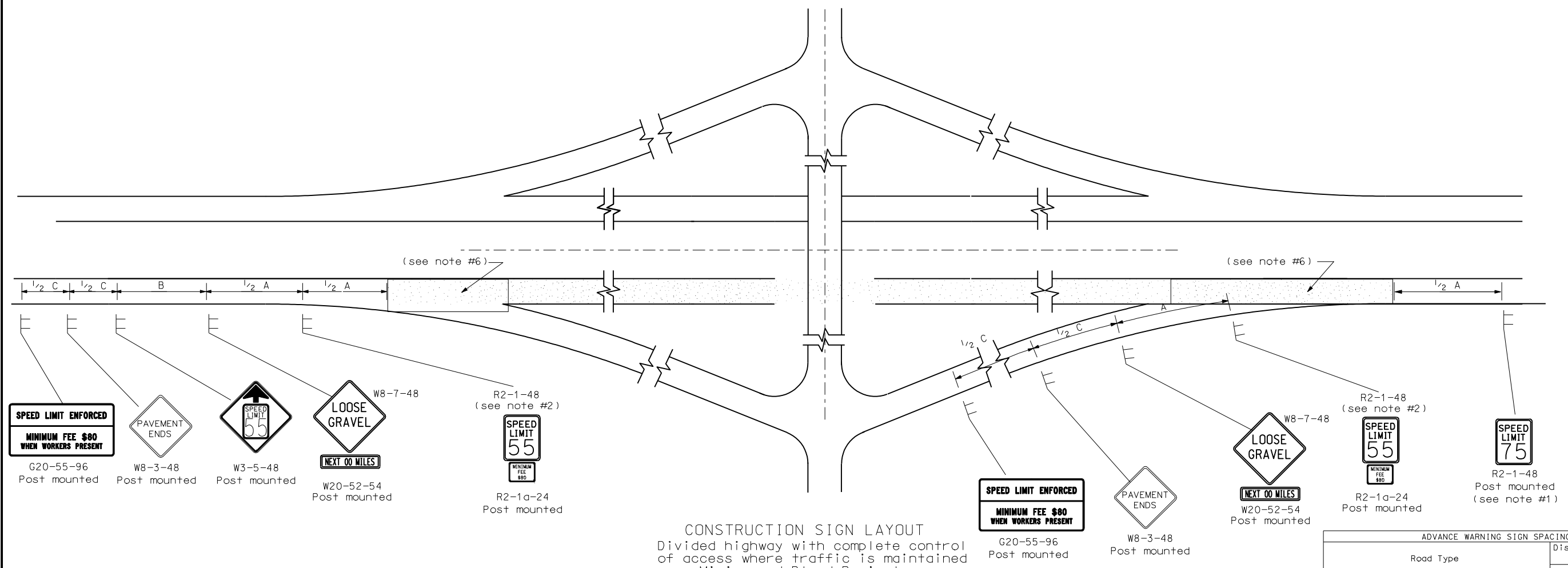


CONSTRUCTION SIGN AND BARRICADE LOCATION DETAILS

D-704-48



CONSTRUCTION SIGN LAYOUT
Divided highway with complete control
of access where traffic is maintained
over Mining and Blend Projects.

1. The speed limit shall be re-established. The exact speed limit shall be determined in the field, dependent on location and conditions.
2. The reduced speed limit shall be determined dependent on the in place speed limit before construction. The speed limit reduction should not exceed 10 mph below the existing speed limit, unless the design speed of the work zone feature has been reduced below the 10 mph. In this case, the speed limit reduction shall not exceed 30 mph. Where speed limits are to be reduced more than 30 mph, a second speed limit sign shall be installed with the desired speed reduction but shall not exceed 30 mph. The second speed limit sign shall be placed at 1/2 B.
3. When warning signs are used in urban areas and the signs are not portable, flags shall be installed. The flags shall be 24 inches square, mounted perpendicular to the edges of the diamond sign, and at such a distance above the edge so that when the flag is limp it will not touch the sign. Rural areas will not require flags.
4. Existing speed limit signs within a reduced speed zone shall be covered.
5. Sign no. R2-1-48, W8-7-48, and W20-52-54 shall be placed just after all important intersections and every five miles in either direction. No Short markings are placed after mine and blend operation. Short term markings shall be placed after the sealing operation.
6. Special flagging and traffic control will have to be done by the contractor when working in this area. Traffic wishing to use the ramp will have to be given instructions as to how to exit or enter the divided highway.
7. The contractor has the option of using portable sign supports in lieu of post mounted sign as shown on the standard drawings as specified in section 704.03 C.
8. The Work Zone Speed Limit Sign G20-55-96 shall be placed only at Freeway, Expressway, US and State highways and urban entrance ramps within the project.
9. The layouts show the signs needed before work begins. The requirements at the actual work areas will require the use of other standards. If the speed limit is reduced in the work areas, the speed limit signs shall have the R2-1a-24 sign placed below.

ADVANCE WARNING SIGN SPACING			
Road Type	Distance Between Signs Min. (ft)		
	A	B	C
Urban - Low Speed (30 mph or less)	150	150	150
Urban - Low Speed (over 30 to 40 mph)	280	280	280
Urban - High Speed (over 40 mph to 50 mph)	360	360	360
Rural - High Speed (over 50 mph to 65 mph)	720	720	720
Urban Expressway and Freeway (55 mph to 60 mph)	850	1350	2200
Rural Expressway and Freeway (70 mph to 75 mph)	1000	1500	2640
Interstate/4-Lane Divided (Maintenance and Surveying)	750	1000	1500

KEY

Type I barricade

Type II barricade

Type III barricade

Sign

Delineator drum

Cones

Work area

Flagger

Sequencing arrow panel

Type A delineator or vertical panels back to back

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

07-09-99

REVISIONS

DATE	CHANGE
01-30-03	Pavement ends sign
07-25-03	Revised R2-1 & R2-1a
04-01-04	Rev fee sign & warning sign spacing. Rev note 2. Added note 8 & 9
09-21-04	Minor revision
12-01-04	PE Stamp added
06-29-05	Replaced R2-5a with W3-5, Rev. Note 2, Rev. Adv. Warning Table

This document was originally issued and sealed by Mark S Gaydos Registration Number PE-4518, on 06/29/05 and the original document is stored at the North Dakota Department of Transportation